

1. (Amended) A method of manufacturing a semiconductor device, comprising the steps of:

(a) forming a first insulating film above a semiconductor substrate formed with semiconductor elements;

(b) forming a contact hole through the first insulating film;

(c) forming a plug made of conductive material capable of being nitrated, the plug being embedded in the contact hole;

(d) heating the semiconductor substrate in a nitrating atmosphere to nitrate the plug from a surface thereof;

(e) forming an etch stopper layer on the first insulating film, the etch stopper layer covering the plug;

and

(f) forming a second insulating film on said etch stopper layer,

wherein said etch stopper layer has a function of stopping etching of said second insulating film.

5. (Amended) A method of manufacturing a semiconductor device according to claim 1, wherein said step (e) includes a step of heating the semiconductor substrate and supplying SiN source gas to the semiconductor substrate to form an SiN layer on the first insulating film through chemical vapor deposition, the SiN layer covering the plug.

8. (Amended) A method of manufacturing a semiconductor device, comprising the steps of:

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(a) forming a lower electrode above a semiconductor substrate formed with semiconductor elements, the lower electrode having a top surface and side surfaces;

(b) forming a dielectric film on a surface of the lower electrode, the dielectric film in a region near a boundary between the top surface and each of the side surfaces being thicker than the dielectric film in a lower region of the side surfaces; and

(c) forming an upper electrode on the dielectric film.

15. (Amended) A method of manufacturing a semiconductor device, comprising the steps of:

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(a) forming a rare metal layer above a semiconductor substrate formed with semiconductor elements;

(b) forming an insulating mask layer on the rare metal layer;

(c) patterning the insulating mask layer by using a resist pattern;

(d) patterning the rare metal layer by using the patterned insulating mask layer; and

(f) forming an insulating film over the semiconductor substrate, the insulating film covering the patterned insulating mask layer.

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19. (Amended) A method of manufacturing a semiconductor device according to claim 15, further comprising the steps of:

(g) annealing the semiconductor substrate in hydrogen-containing gas.

Please **ADD** the following new claims:

Sub C7 22. (New) A method of manufacturing a semiconductor device according to claim 1, wherein said etch stopper layer is made of at least one of TaO, NbO, TiO and aluminum.

A6 23. (New) A method of manufacturing a semiconductor device according to claim 6, further comprising the steps of:

- (i) forming an oxide dielectric layer on the rare metal layer; and
- (j) forming an opposing electrode on the oxide dielectric layer.

24. (New) A method of manufacturing a semiconductor device according to claim 8, wherein said dielectric film in said region is about 60% or more thicker than that in said lower region.

Sub D2 25. (New) A method of manufacturing a semiconductor device according to claim 15, wherein said insulating mask layer is a TaO layer.